IN THE CLAIMS

1. (currently amended) A rendering apparatus for showing depth of field in an image, comprising:

(a) a Z buffer operable to establish a depth ~~direction~~ value of objects in an image;

(b) an image generator unit to generate an image in a just-in-focus state while writing a Z value of each of dots in the image into the Z buffer;

(c) a blurring unit operable to produce a blurred image of the image in the just-in-focus state; and

(d) an overwriting unit operable to selectively overwrite portions of the blurred image on the image in the just-in-focus state by comparing a preset Z value to the Z value of each of the dots in the Z buffer.

2. (original) A rendering apparatus as claimed in claim 1, wherein the preset Z value is changed arbitrarily and continuously with time such that an image field of the objects that are in the just-in-focus state is correspondingly changed.

3. (original) A rendering apparatus as claimed in claim 1, wherein the blurring unit is operable to produce reduced images and to magnify the reduced images to generate out-of-focus images.

4. (original) A rendering apparatus as claimed in claim 3, wherein the blurring unit uses a pixel-interpolation algorithm to produce the reduced images.

5. (original) A rendering apparatus as claimed in claim 4, wherein the pixel-interpolation algorithm comprises a bilinear filter algorithm.

6. (original) A rendering apparatus as claimed in claim 1, wherein the overwriting unit is operable to selectively mask objects corresponding to the preset Z value and to overwrite all un-masked objects with corresponding ones of the out-of-focus images such that objects located farther and nearer than the preset Z value are out of focus.

7. (original) A rendering apparatus as claimed in claim 1, further comprising a video random access memory (VRAM) having a rendering area and a texture area, wherein the blurring unit is operable to produce sequentially reduced images in the VRAM and to magnify the reduced images to generate a plurality of different levels of out-of-focus images.

8. (currently amended) A method for showing depth of field in an image, comprising:

(a) establishing a depth ~~direction~~ value of objects in an image;

(b) generating an image in a just-in-focus state while writing a Z value of each of dots in the image into a Z buffer;

(c) producing a blurred image of the image in the just-in-focus state; and

(d) selectively overwriting portions of the blurred image on the image in the just-in-focus state by comparing a preset Z value to the Z value of each of the dots in the Z buffer.

9. (original) A method as claimed in claim 8, wherein the preset Z value is changed arbitrarily and continuously with time such that an image field of the objects that are in the just-in-focus state is correspondingly changed.

10. (original) A method as claimed in claim 8 wherein the blurred image is produced by reduced images and magnifying the

reduced images to generate out-of-focus images.

11. (original) A method as claimed in claim 10, further comprising using a pixel-interpolation algorithm to produce the reduced images.

12. (original) A method as claimed in claim 11, wherein the pixel-interpolation algorithm comprises a bilinear filter algorithm.

13. (original) A method as claimed in claim 8, objects are selectively masked corresponding to the preset Z value and all un-masked objects are overwritten with corresponding ones of the out-of-focus images such that objects located farther and nearer than the preset Z value are out of focus.

14. (original) A method as claimed in claim 8, wherein the blurring is executed in a video random access memory (VRAM) having a rendering area and a texture area, including producing sequentially reduced images in the VRAM and magnifying the reduced images to generate a plurality of different levels of out-of-focus images.

15. (currently amended) A storage medium for storing an image-generating program capable of execution by a microprocessor to perform steps for showing depth of field in an image, the steps comprising:

(a) establishing a depth ~~direction~~ value of objects in an image;

(b) generating an image in a just-in-focus state while writing a Z value of each of dots in the image into a Z buffer;

(c) producing a blurred image ~~from~~of the image in the just-in-focus state; and

(d) selectively overwriting portions of the blurred image on the image in the just-in-focus state by comparing a preset Z value to the Z value of each of the dots in the Z buffer.

16. (original): A storage medium as claimed in claim 15, further comprising the step of arbitrarily and continuously changing the preset Z value with time such that an image field of the objects that are in the just-in-focus state is correspondingly changed.

17. (original) A storage medium as claimed in claim 15, wherein the step of producing a blurred image produces reduced images and magnifies the reduced images to generate out-of-focus images.

18. (original) A storage medium claimed in claim 17, wherein the step of producing a blurred image uses a pixel-interpolation algorithm to produce the reduced images.

19. (original) A storage medium as claimed in claim 18, wherein the pixel-interpolation algorithm comprises a bilinear filter algorithm.

20. (original) A storage medium as claimed in claim 15, wherein the step of selectively overwriting selectively masks objects corresponding to the preset Z value and overwrites all un-masked objects with corresponding ones of the out-of-focus

images such that objects located farther and nearer than the preset Z value are out of focus.

21. (original) A storage medium as claimed in claim 15, wherein the step of blurring is executed in a video random access memory (VRAM) having a rendering area and a texture area, including producing sequentially reduced images in the VRAM and magnifying the reduced images to generate a plurality of different levels of out-of-focus images.